

FAST HIGH-SWING MODULATOR DRIVER CIRCUITABSTRACT OF THE DISCLOSURE

A fast, high-swing driver circuit for driving an electro-optical modulator includes an output stage comprising first and second transistors arranged as a differential pair. The collector of the first transistor is coupled to ground, and its base provides the stage's input. The collector of the second transistor is coupled via an impedance to a supply voltage, and provides the stage's output. A reference voltage is provided to the second transistor's base, which is also AC-coupled to ground. A bias generator provides the second transistor's base voltage, and a second differential pair converts a differential input signal to a single-ended output that drives the output stage's input - preferably via a pair of cascaded emitter-follower stages that serve to present a low impedance. A complete electro-optical modulator driver is formed with the addition of a bias-T network at the output stage's output.